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a rotor freely rotatably mounted in said casing for free rotation about an axis of rotation which is transverse to said flow axis.

## Please add the following new claims:

-- 37. Apparatus for mixing a fluid medium with a solids-liquid suspension, comprising:

- a mixer casing defining an interior space and having an inlet for introduction of a mass flow of material which includes the solids-liquid suspension into said interior space, and an outlet for discharging a mixture of the fluid medium and solids-liquid suspension from said interior space;
- a conduit for feeding the fluid medium into contact with the solids-liquid suspension; and
- a mixing rotor freely rotatably mounted in said casing for free rotation about an axis of rotation; wherein
- said mixing rotor includes mixing blades which are positioned for contact with the fluid medium and solids liquid suspension introduced into the mixer casing to thereby responsively cause the mixing rotor to rotate and mix the fluid medium with the solids liquid suspension.
- 38. Apparatus for mixing a fluid medium with a solids-liquid suspension, comprising:
  - a mixer casing defining a flow axis, an inlet for introducing a mass flow of material which includes the solids-liquid suspension into said mixer casing, and an outlet for discharging a mixture of the fluid medium and solids-liquid suspension from the mixer casing;
  - a conduit for feeding the fluid medium into contact with the solids-liquid suspension; and





a mixing rotor freely rotatably mounted in said mixer casing for free rotation about an axis of rotation which is transverse to the flow axis of said mixer casing, wherein

said mixing rotor includes mixing blades which are positioned for contact with the fluid medium and solids liquid suspension introduced into the mixer casing to thereby responsively cause the mixing rotor to rotate and mix the fluid medium with the solids liquid suspension.

39. Apparatus for mixing a fluid medium with a solids-liquid suspension, comprising:

- a mixer casing defining an interior space and having an inlet for introduction of a mass flow of material which includes the solids-liquid suspension into said interior space, and an outlet for discharging a mixture of the fluid medium and solids-liquid suspension from said interior space;
- a conduit for feeding the fluid medium into contact with the solids-liquid suspension;
- a mixing rotor freely rotatably mounted in said mixer casing for free rotation about an axis of rotation;
- said mixing rotor includes mixing blades which are positioned so as to establish an open center space of the mixing rotor, and which are contacted with the fluid medium and solids liquid suspension introduced into the mixer casing to thereby responsively cause the mixing rotor to rotate and mix the fluid medium with the solids liquid suspension

40. Apparatus as in claim 37, 38 or 39, wherein the conduit introduces the fluid medium directly into said interior space of said mixer casing.

41. Apparatus as in claim 37, 38 or 39, wherein said inlet includes inlet piping for the mass flow of material, and wherein said conduit introduces the fluid medium into the inlet piping.



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42. Apparatus as recited in claim 37, 38 or 39, wherein said inlet is provided with at least one throttling member which throttles the mass flow of material into said casing.

43. Apparatus as recited in claim 42, wherein said throttling member comprises at least one rib mounted in the vicinity of said inlet in said casing for causing a mass center of the mass flow of material entering said casing to deviate from flow centered on said axis of rotation.

- 44. Apparatus as recited in claim 42, wherein said throttling member comprises a valve mounted in the vicinity of said inlet for causing a mass center of the mass flow of material entering said casing to deviate from flow centered on said axis of rotation.
- 45. Apparatus as recited in claim 44, wherein said valve comprises a part of said casing.
- 46. Apparatus as recited in claim 44, wherein said inlet includes inlet piping for the mass flow of material, and wherein said throttling member comprises a valve mounted in the vicinity of said inlet piping.

17. Apparatus as recited in claim 37, 38 or 39, further comprising at least one stationary mixing member disposed within said casing.

48./Apparatus as recited in claim 47, wherein said at least one stationary mixing member is mounted at least 90 degrees from said outlet opposite a direction of rotation of said rotor.

3. Apparatus as recited in claim 47, wherein said stationary mixing member comprises a rib attached to a wall of said casing.

50. Apparatus as recited in claim 37, 38 or 39, wherein said outlet includes a diffuser-like outlet pipe which recovers dynamic pressure from the flow of mixed pulp.

51. Apparatus as recited in claim 37, 38 or 39, wherein said rotor has a center; and wherein said rotor is formed of a shaft mounted on bearings in said casing.